

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: McGRAW-EDISON

Report Number: P647883

Luminaire Tested: **GALN-SA4A-835-U-SL4**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P647883  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-18)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GALN-SA4A-835-U-SL4  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 80 CRI, 3500K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV SPILL  
LIGHT ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 13865.4 lumens  
Efficiency: N/A  
Efficacy: 114.6 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B2 - U0 - G3

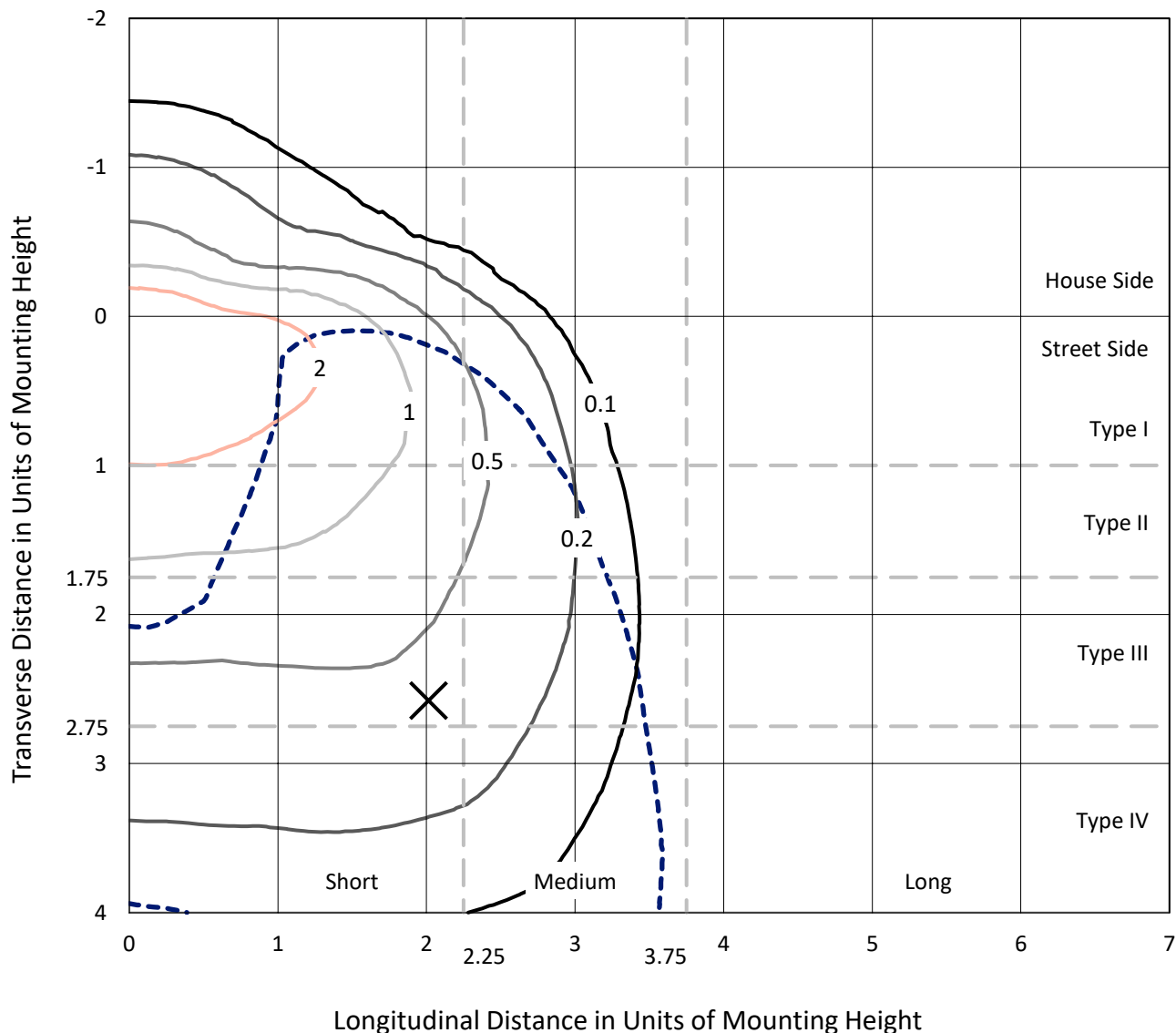
Input Watts (W): 121  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

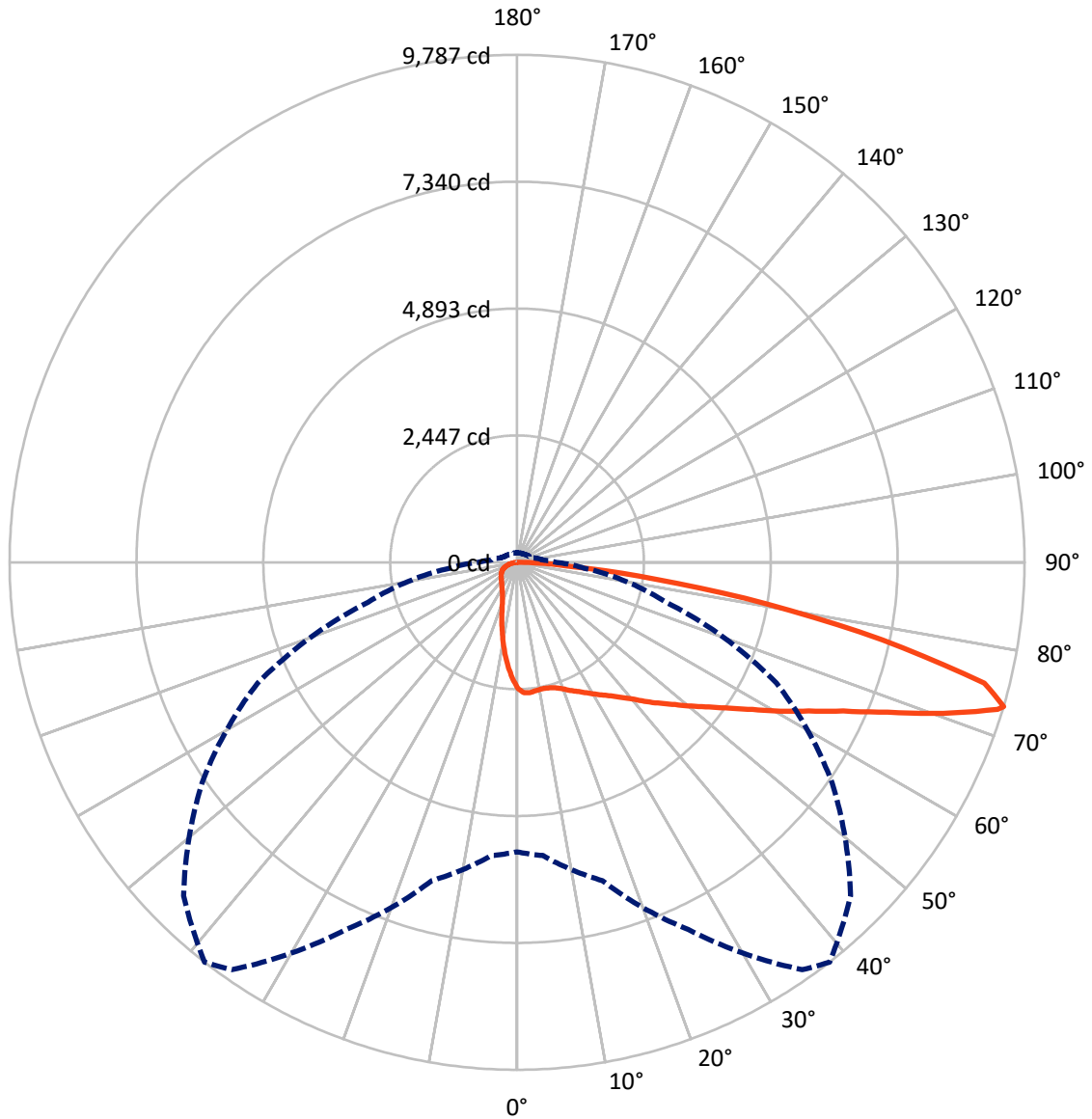
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 38-Deg Lateral    - - - Horizontal Cone Through 73-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1863.9	0.0	1863.9
	% Fixture	13.4	0.0	13.4
<b>Street Side</b>	Lumens	12001.5	0.0	12001.5
	% Fixture	86.6	0.0	86.6
<b>Total</b>	Lumens	13865.4	0.0	13865.4
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	212.6	1.5
10°-20°	545.2	3.9
20°-30°	849.1	6.1
30°-40°	1245.4	9.0
40°-50°	1847.4	13.3
50°-60°	2617.4	18.9
60°-70°	3320.2	23.9
70°-80°	2763.8	19.9
80°-90°	464.4	3.3
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	13865.4	100.0
0°-180°	13865.4	100.0

**Coefficient of Utilization**



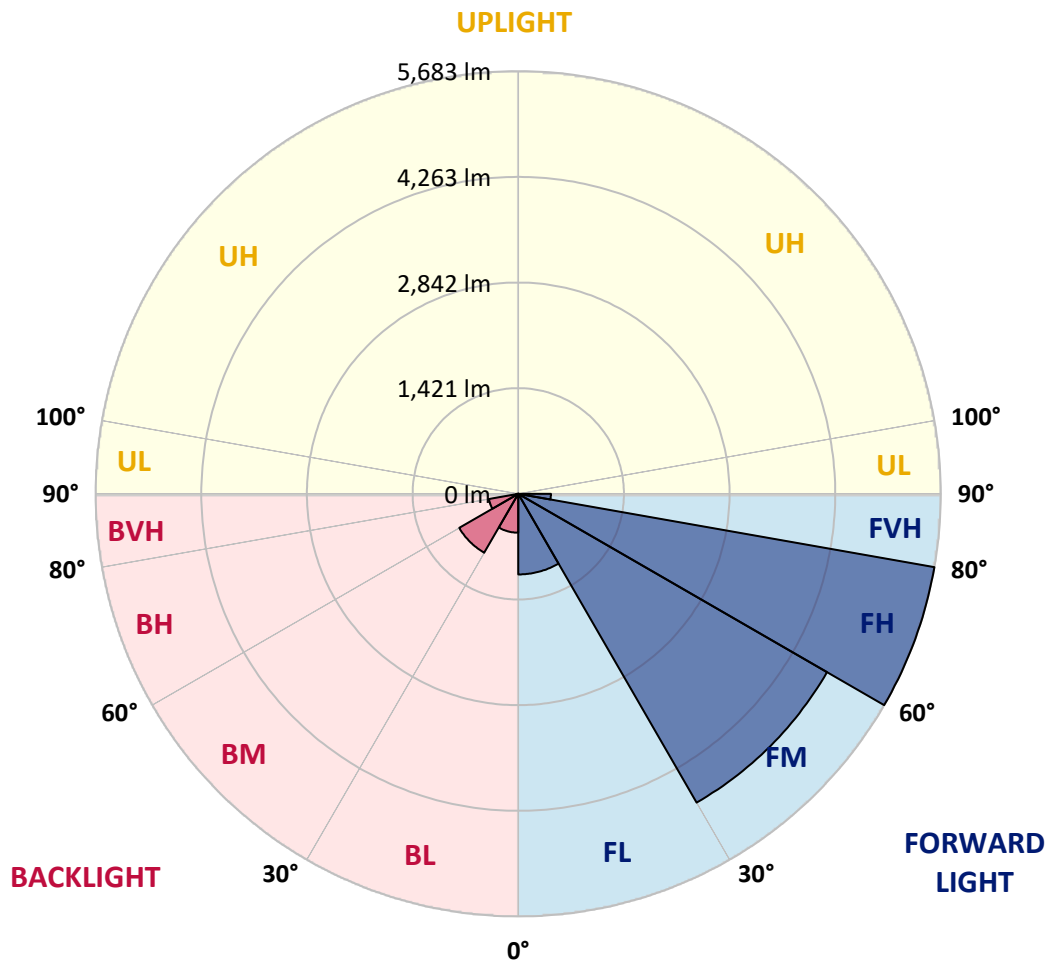
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1083.9	7.8			
FM (30°-60°)	4795.0	34.6			
FH (60°-80°)	5683.4	41.0			G3/7500
FVH (80°-90°)	439.2	3.2			G3/500
BL (0°-30°)	523.0	3.8	B2/1000		
BM (30°-60°)	915.1	6.6	B1/1000		
BH (60°-80°)	400.6	2.9	B1/500		G1/500
BVH (80°-90°)	25.2	0.2			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G3**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	38°	45°	55°	65°	75°	85°
0°	2435.9	2435.9	2435.9	2435.9	2435.9	2435.9	2435.9	2435.9	2435.9	2435.9	2435.9
2.5°	2533.8	2546.3	2540.1	2531.4	2526.0	2520.5	2512.6	2489.9	2471.9	2452.4	2421.8
5°	2552.6	2560.4	2554.9	2544.0	2531.4	2526.0	2511.1	2481.3	2452.4	2419.5	2374.1
7.5°	2541.6	2544.8	2538.5	2525.2	2514.2	2504.0	2486.8	2453.9	2418.7	2378.8	2319.2
10°	2502.5	2514.2	2514.2	2503.3	2492.3	2486.8	2469.6	2438.3	2406.2	2360.7	2290.3
12.5°	2470.4	2482.9	2493.1	2489.9	2489.2	2489.2	2475.8	2452.4	2414.8	2371.7	2287.9
15°	2448.4	2463.3	2485.2	2497.8	2505.6	2507.9	2502.5	2482.1	2443.7	2393.6	2297.3
17.5°	2443.7	2461.8	2501.7	2529.1	2549.4	2548.7	2547.1	2518.9	2476.6	2425.0	2309.1
20°	2464.9	2488.4	2544.0	2587.0	2616.8	2611.3	2602.7	2565.9	2516.6	2458.6	2320.0
22.5°	2528.3	2552.6	2613.7	2660.6	2689.6	2689.6	2663.8	2615.2	2562.8	2497.8	2334.9
25°	2619.1	2645.8	2710.7	2758.5	2771.8	2761.6	2735.8	2677.1	2616.8	2554.1	2366.2
27.5°	2730.3	2762.4	2822.7	2862.6	2858.7	2850.9	2824.3	2749.1	2688.8	2631.7	2419.5
30°	2868.9	2892.4	2955.0	2964.4	2950.3	2948.8	2911.2	2836.0	2779.6	2735.8	2495.4
32.5°	2999.7	3020.8	3070.9	3074.8	3049.8	3052.9	3017.7	2948.8	2916.7	2901.0	2623.0
35°	3138.3	3149.2	3192.3	3187.6	3171.2	3168.8	3154.7	3088.9	3099.1	3127.3	2803.9
37.5°	3254.1	3276.1	3300.3	3304.3	3303.5	3311.3	3320.7	3289.4	3348.1	3436.6	3041.2
40°	3360.6	3379.4	3415.4	3428.0	3458.5	3474.2	3506.3	3507.1	3642.5	3788.2	3333.2
42.5°	3432.7	3464.8	3532.1	3554.8	3629.2	3676.2	3723.9	3774.8	3971.4	4158.5	3677.8
45°	3495.3	3537.6	3649.6	3720.0	3821.0	3878.2	3979.2	4085.7	4368.4	4613.4	4027.8
47.5°	3590.1	3627.6	3756.1	3880.5	4033.2	4099.0	4250.1	4409.1	4778.6	5047.2	4362.9
50°	3721.6	3744.3	3875.1	4077.9	4272.8	4357.4	4557.1	4786.5	5217.1	5475.5	4657.3
52.5°	3889.9	3899.3	4003.5	4273.6	4530.4	4635.4	4900.0	5167.8	5600.8	5847.4	4890.6
55°	4088.8	4073.2	4154.6	4481.1	4824.8	4961.9	5246.1	5553.8	6032.2	6148.1	5060.5
57.5°	4285.4	4261.1	4326.1	4733.2	5188.2	5353.4	5684.6	5951.6	6417.5	6429.2	5179.5
60°	4493.6	4475.6	4553.1	5029.2	5633.7	5829.4	6135.6	6364.2	6790.2	6625.0	5198.3
62.5°	4707.4	4678.4	4788.8	5362.0	6135.6	6313.3	6610.1	6802.7	7155.8	6697.8	5017.5
65°	4914.9	4901.6	5072.3	5757.4	6707.2	6909.2	7197.3	7328.1	7448.7	6588.2	4568.8
67.5°	5135.7	5162.3	5434.8	6285.1	7452.6	7706.3	8017.1	7894.2	7532.5	6069.0	3847.7
70°	5472.4	5489.6	5910.9	6976.5	8413.3	8719.5	8869.8	8095.4	7128.4	5083.2	2892.4
72.5°	5617.2	5693.2	6336.0	7702.4	9504.8	9692.0	9156.4	7646.8	5938.3	3453.0	1519.8
73°	5585.1	5676.0	6355.6	7812.8	9590.2	9786.7	9095.3	7415.8	5520.2	2973.8	1302.9
75°	5185.0	5297.0	6101.1	7720.4	9424.2	9306.7	8113.4	6320.4	3730.2	1352.2	593.5
77.5°	4091.2	4123.3	4834.2	6234.2	7421.3	7203.6	6072.2	3950.2	1523.7	502.7	336.7
80°	2052.2	2170.5	2724.8	3571.3	4962.7	4891.4	3832.8	1868.2	635.0	295.2	223.2
82.5°	987.4	1071.1	1327.2	1741.4	2742.1	2677.1	1898.0	1021.0	403.2	172.3	131.5
85°	635.8	698.4	844.9	830.8	1127.5	1076.6	852.7	772.8	238.8	90.0	91.6
87.5°	419.7	459.6	551.2	440.8	410.3	371.1	376.6	435.3	47.0	34.5	12.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2435.9	2435.9	2435.9	2435.9	2435.9	2435.9	2435.9	2435.9	2435.9	2435.9	2435.9
2.5°	2409.3	2399.1	2365.4	2332.6	2301.2	2271.5	2251.9	2226.1	2208.8	2213.5	2220.6
5°	2349.0	2326.3	2266.8	2208.8	2154.0	2089.0	2036.6	1994.3	1962.2	1950.5	1948.1
7.5°	2285.6	2247.2	2161.9	2062.4	1969.2	1888.6	1795.4	1749.2	1695.2	1676.4	1670.1
10°	2247.2	2195.5	2075.7	1937.1	1797.0	1663.1	1562.1	1479.9	1405.5	1391.4	1384.3
12.5°	2236.2	2168.1	2006.8	1828.3	1642.0	1477.5	1328.0	1219.9	1147.9	1131.4	1107.2
15°	2230.0	2145.4	1942.6	1718.7	1482.2	1281.8	1124.4	998.3	932.6	888.7	889.5
17.5°	2224.5	2119.6	1870.6	1598.9	1344.4	1113.4	939.6	826.1	765.8	742.3	739.9
20°	2216.7	2089.0	1787.6	1472.8	1187.0	960.0	802.6	718.0	677.3	657.7	656.9
22.5°	2213.5	2059.3	1706.2	1344.4	1047.7	841.7	711.7	652.2	626.4	613.1	613.1
25°	2221.4	2038.1	1620.8	1222.3	923.9	740.7	649.1	608.4	593.5	586.5	584.1
27.5°	2245.6	2028.8	1536.2	1100.1	810.4	671.8	606.8	578.6	567.7	562.2	563.0
30°	2291.8	2028.0	1453.2	979.5	725.8	619.4	573.2	553.6	545.0	541.8	541.1
32.5°	2366.2	2045.2	1371.8	880.1	654.6	575.5	541.8	527.7	523.8	521.5	520.7
35°	2492.3	2093.7	1291.2	789.3	599.8	536.4	512.1	505.0	499.6	501.9	502.7
37.5°	2662.2	2177.5	1214.4	718.0	558.3	507.4	487.0	480.8	477.6	480.0	482.3
40°	2890.1	2298.1	1150.2	660.9	528.5	483.1	465.1	459.6	456.5	460.4	461.2
42.5°	3141.4	2437.5	1097.0	616.2	504.3	462.8	445.5	439.3	436.9	439.3	440.0
45°	3399.8	2599.6	1069.6	584.1	483.9	447.9	429.9	422.8	417.3	415.8	418.1
47.5°	3654.3	2740.5	1068.8	564.5	467.5	434.6	415.0	407.2	400.1	396.2	395.4
50°	3861.8	2852.5	1087.6	555.9	453.4	419.7	400.1	392.3	382.9	375.1	376.6
52.5°	4018.4	2925.3	1096.2	552.0	445.5	404.0	384.5	377.4	366.4	356.3	356.3
55°	4119.4	2942.5	1075.1	548.1	439.3	387.6	366.4	360.2	349.2	339.0	339.0
57.5°	4153.8	2889.3	999.1	538.7	433.0	373.5	348.4	343.0	334.3	324.2	322.6
60°	4073.9	2709.2	866.0	510.5	420.5	358.6	328.9	326.5	323.4	314.8	314.0
62.5°	3766.2	2327.1	721.1	473.7	399.3	343.0	310.9	314.8	317.1	312.4	311.6
65°	3254.1	1889.4	616.2	422.8	371.1	321.0	291.3	301.5	307.7	307.7	306.2
67.5°	2639.5	1450.9	519.1	379.0	335.9	291.3	269.4	277.2	281.9	280.3	284.2
70°	1876.1	982.7	422.8	328.9	291.3	257.6	241.2	241.2	238.0	236.5	236.5
72.5°	909.8	561.4	343.0	274.8	248.2	220.0	206.7	201.2	195.0	194.2	190.3
73°	760.3	503.5	327.3	264.7	238.0	214.5	199.7	191.1	187.1	184.0	183.2
75°	462.8	382.1	273.3	223.2	202.8	184.8	171.5	163.6	159.7	157.4	156.6
77.5°	304.6	285.0	212.2	170.7	155.0	144.1	138.6	130.8	128.4	125.3	125.3
80°	227.1	217.7	151.9	120.6	111.2	101.8	100.2	98.7	92.4	88.5	86.9
82.5°	146.4	155.0	103.4	80.6	70.5	62.6	63.4	65.8	59.5	54.0	52.5
85°	104.1	112.0	62.6	36.8	29.8	25.8	29.0	25.8	26.6	21.1	17.2
87.5°	17.2	29.8	11.0	4.7	2.3	1.6	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)